



Creation Matters

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Genesis: The Book of Beginnings

by Wayne Spencer, M.S.

The book of Genesis tells us much about God's nature and character, and provides important background which enables us to understand the Old and New Testaments. It is the book of beginnings, telling us not only how He brought all things into existence, but also how the Creator relates to mankind.

When Moses first wrote down the Torah, the "Law of Moses," there were many idolatrous beliefs in the world. Moses was brought up in the educational system of the Egyptians (Acts 7:22), who had an animistic form of religion. The plagues of Egypt were carefully designed by God to be a systematic refutation of the false religious ideas of the Egyptians.

The Egyptians, as well as some other peoples in the ancient world, worshiped the Sun, a god they called Amen-Ra. Genesis refutes this sort of belief by virtue of the fact that from the first day to the fourth day of the Creation week there was no Sun. Exactly what the light was like on those days we don't know, except that it must have come from a particular point so as to provide a day/night cycle for Earth;

but God did not need an object like the Sun in order to provide light.

The only God

God established himself in Genesis as THE source of every good thing. Nature (i.e., God's creation) displays the glory of God, giving tangible illustrations of His greatness, intelligence, power, and goodness. Yet, Genesis 1 shows that God is separate from the universe he made, because he existed before it — "In the beginning God" God's world (general revelation) agrees with God's revealed word (special revelation), provided that both the natural data and the scriptural data are interpreted correctly, showing the objective truth of the Bible.

When the Bible speaks of God as Creator, it often emphasizes that the God of the Bible is the only God, so we must revere and worship only Him. In Genesis, God is constantly "introducing" Himself and showing to certain individuals the essentials of His own nature and character. For Noah, Abraham, Isaac, and Jacob, God clarifies who He is and how He will make

special covenants and provisions for them.

God worked through His chosen people

Genesis not only addresses who God is, as Creator of all people. God also shows how He chose to work by calling out from among the world's people Abraham, and making a covenant that would be for all of Abraham's descendants. Thus, the origin of the Hebrew people, a significant theme in Genesis, is developed in a very interesting way. Genesis alternates its focus throughout, from that of a certain family to that of the world or a region of nations.

This alternating focus shows God's sovereignty and authority on both levels (global and family), and how God relates to not only fallen unbelievers but also to fallen believers. Abraham and his descendants would become a nation which would be God's chosen representatives in a fallen world. Genesis does not depict God's representatives as perfect people. Rather, they were considered righteous because

... continued on p. 2

Is Darwinism Central to Science Education?

by Jerry Bergman, Ph.D.

"Nothing in biology makes sense except in the light of evolution"
Theodosius Dobzhansky (1900-1975)

It has often been said that "evolution" is the cornerstone of biology and is central to an understanding of both living and extinct organisms and, consequently, the teaching of evolution must be a central part of public school and college life science classes. In the words of the *National Academy of Science*, evolu-

tion is "the most important concept in modern biology, a concept essential to understanding key aspects of living things" (1998, p. viii).

Although evolutionists often talk about the central importance of evolution in gaining a basic understanding

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they believed what God told them (Genesis 15:6; Romans 3:28-5:2), and this is also how we receive righteousness today through faith in Christ.

Varying its focus

Genesis touches on the origins of many different peoples who are mentioned later in the Old Testament. In the latter chapters (36-50) Genesis varies its focus from the ungodly descendants of Abraham through Esau, to the godly line in the descendants of Jacob. It is as if Genesis adjusts its “field of view” in a manner like that of using a zoom lens. In some sections, it zooms out to take a wide field of view that addresses all people, such as in Genesis 1 and in the Flood account. In other sections it zooms in, focusing on what God did in the lives of certain people.

Archeology has confirmed the historical accuracy of Genesis in a number of ways: cities from the time of Abraham; writing from ancient times; and cultural practices. While these are very much in agreement with archeological research, there are still some unanswered questions about certain places, events, and cultural backgrounds. Though Genesis should be viewed as historically accurate, it is not meant to be a complete history of ancient times. It is written as an epic historical narrative, which has multiple “main characters.”

From families to nations

Genesis shows how families grew into nations. It is interesting to see the connections between individuals mentioned in Genesis and nations of peoples mentioned later in the Old Testament. One can also trace how one person’s disobedience to God, such as that of Cain or Noah’s son Ham, apparently had far reaching effects that led to wicked nations of peoples who God would later judge severely. For example, the Israelites’ conquering of the land of Canaan was the working out of the curse pronounced on Ham’s son, Canaan, in Genesis 9, and contained in prophetic statements God made to Abraham in Genesis 15:13-16.

In Genesis you can also see how certain individuals among the descendants of

Abraham, such as Joseph, had a very important positive influence on a multi-national scale. God graciously provided not only for Jacob’s entire family, but also for many other people in the ancient world who came to Egypt to get food during a great famine. Genesis gives a unique perspective on how God, in His sovereignty, uses individuals to affect history.

Complementary accounts

Genesis and Exodus are very complementary, and may have been written with a related purpose in mind. The entire book of Genesis covers many years of history, from Creation to the end of the life of Joseph. Exodus begins the story of the Hebrew people, picking up essentially where Genesis leaves off. Together they give the account of how the Hebrew people became a nation, and how God directed and called them to follow Him under the Levitical sacrificial priestly system.

Additionally, they both show that the true God is unlike the false gods of the time, and that God wanted to be personally involved, as the first priority, in the lives of His chosen people. God would not tolerate being accepted as just one god among many, but He insisted on the exclusive worship of Himself and obedience to His commands. Both books reveal God’s nature and character in leading people out of idolatry to the one true God — the infinite-personal Creator-God.

Genesis shows, through its accounts of the lives of Noah, Abraham, Isaac, Jacob, and Joseph, that God is faithful to his covenants over many generations. Before God gave His Law to the Jews, he taught them about His character through the lives of Noah, Abraham, Isaac, Jacob, and Joseph. Genesis sets the stage for God to call out a people as His own from among the nations. Genesis ends with Abraham’s descendants’ having become a nation in population size, though they were not organized as a nation, being slaves at that point. Exodus addresses more about how the Lord organized them into a theocratic nation (albeit without a land), and deals specifically with God’s requirements for the Jews.

The God of all people

Genesis does not just present God as only the God of the Jews, but also as the God

of all people. God’s sweeping redemptive plan was to bless the whole world through the descendants of Abraham (Gen. 12). God did not want the Jews to forget either their origins as created beings or their calling as His people. They would be God’s chosen people, not because they were better than others who were living at the time, but because they were to represent Him to the unbelieving world.

As the Judge of all people, He relates to those who believe Him in a very personal way, providing for people through judgment and in spite of judgment. Adam, Eve, Noah, and Noah’s sons all had to live with the consequences of God’s judgment. Yet, God provided a way of redemption through the judgments, and He blessed them in certain ways in spite of the judgments. The banishment from the Garden of Eden and the accompanying Curse; the global Flood; and the confusion of the languages are all major judgment events in Genesis.

God’s promises

Genesis is central for understanding the covenants that God has made with mankind. These covenants give us insight into God’s plan for history. In Genesis 1 and 2 is the Adamic or Edenic Covenant regarding the garden and the tree of the knowledge of good and evil. The time from Adam to Noah may be said to be governed by a covenant, though little is known about it. It is implied in the account of Cain and Abel, in Genesis 4, wherein God had certain expectations for how they were to come to him. The sacrifice of an

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animal by Abel hints at something similar to the more elaborate sacrificial system which came later in the time of Moses. Then in Genesis 6 and 8, after the Flood, God made a covenant with Noah. And beginning in Genesis 12, God made a covenant with Abraham, a promise that has carried through to his descendants, even to all generations of the descendants of Isaac, who was the "child of promise."

Conclusion

Bible scholars have said that the New Testament is built on the Old Testament, and that the Old Testament is built on the book of Genesis. Mankind's sin is a major theme in the book, along with how God

makes covenants with people to give hope to mankind. Genesis also explains how sin came into the human experience and gives the first hint of God's plan to send a Savior to redeem fallen man (Gen. 3:15). Genesis illustrates how the infinite-personal Creator-God relates to fallen man, especially to those who are his chosen representatives in the world.

He is supremely both Judge and Provider. He is sovereign over the direction of history. While Genesis shows God's acting as judge of all unbelieving men, it also shows that He relates in a very personal way to those who believe Him. Furthermore, Genesis begins with the Creation account itself, which shows that the

God of the Bible is the true God of all people, and that he has provided all that we have.

Mr. Spencer has an M.S. degree in physics. This article is adapted from an excerpt from Mr. Spencer's book entitled Our Genesis.

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Is Darwinism Central?

...continued from page 1

of the natural world, in the daily work of both scientific education and research, evolution is a rarely-mentioned non-issue. This has been my experience as a research associate involved in cancer research in the department of pathology at the Medical College of Ohio. As Johanson (2003) noted, scientists, in their daily world of scientific research ...

... rarely deal directly with macroevolutionary theory, be it biological or physical. For example, in my 25 years of neuroscience teaching and research I have only VERY rarely had to deal with natural selection, origins, macroevolution, etc. My professional work in science stems from rigorous training in biology, chemistry, physics, and math, not from world views about evolution. I suspect that such is the case for most scientists in academia, industry, and elsewhere.

A Survey of Textbooks

Having taught biology and related courses at the college level for the past 20 years, I am in a position to evaluate this claim by examining the content of the textbooks that we have used in teaching life science courses (Table 1). The anatomy and physiology textbooks we have used *never* mentioned evolution. In the microbiology text, the only reference to evolution was the development of bacterial resistance (which is not a problem for creationists). Most of the biochemistry/molecular biology, genetics, and cell biology texts we have used never, or hardly ever, mentioned evolution. The only courses that cover it in any detail are Biology 101 and Anthropology (and even in those classes many of the instructors skip this section). Even those chapters labeled "evolution" often devote a considerable amount of time to non-evolution topics such as basic genetics, human development, population genetics, and related areas.

If, as Dobzhansky stated, "*Nothing* in biology makes sense except in the light of evolution," (1972, emphasis added) why

is it rarely, if ever, mentioned in most natural science books? And why is it a minor topic even in introductory biology books that cover the subject in more depth than most other courses (except in formal classes on evolution)?

During my biology/natural science education, which entailed over 8 years of full-time schooling, Darwinism was rarely ever mentioned. For my graduate work in biomedical science, it *never* came up except to note that a gene was "evolutionarily conserved" (meaning only that the gene sequence is very similar in most life forms, whether they are considered to be "advanced" or "primitive"). This is a topic in which I am very interested, and whenever it was discussed, I listened carefully and would have remembered what was said. Also, while developing a college-level course on evolution, I surveyed most of the four-year colleges in Ohio, and many in Michigan. I found that for biology majors, at most only *one* class in evolution was required.

Although the subject of evolution is ignored in most science classes, I cover it in more depth than, in my experience, is the usual practice. This is because of my special interest in the subject. Many of the instructors at the college where I teach totally ignore evolution. For some, this is because there already is too much material that has to be covered (and *something* has to be cut). But most elect to skip evolution because it is one of the least important subjects.

In summary, judging by the limited evolutionary content of the textbooks used in most science classes, the practice by many instructors of ignoring the subject, and the limited requirement for evolution-related classes even for biology majors, the oft-repeated claim about evolution's being central to the natural sciences is just not true. My findings agree with Wilkins (2000, p. 1051), who flips Dobzhansky's quote completely upside down.

The subject of evolution occupies a special, and paradoxical, place within biology as a whole. While the great majority of biologists would probably agree with Theodosius Dobzhansky's dictum that 'nothing in biology makes sense except in the light of evolution,'

most can conduct their work quite happily without particular reference to evolutionary ideas. 'Evolution' would appear to be the indispensable unifying idea and, at the same time, a highly superfluous one. (emphasis added)

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Thanks!

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May the Lord richly bless each of you in 2004.

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Table 1: Evolution Content of College-level Natural Science Texts that I Have Used over the Past 20 Years.

Textbook		Evolution Content
1. Introduction to Biology		
<i>Biology.</i> (Mader) 6th edition. McGraw Hill. 1998.		4 chapters out of 51; occasionally mentioned in the other 47 chapters
<i>Life.</i> (Lewis, et al.) 4th edition. McGraw Hill. 2002.		One unit (5 chapters out of 45); occasionally mentioned elsewhere
2. Anatomy and Physiology		
<i>Anatomy and Physiology.</i> (Hole, et al.) 10th edition McGraw Hill. 2003.		Not mentioned
<i>Principles of Anatomy and Physiology.</i> (Tortora and Grabowski) Harper Collins. 1996.		Not mentioned
3. Biochemistry / Molecular Biology		
<i>Biochemistry, A Foundation.</i> (Ritter) Brooks Cole. 1996.		A few sentences or very short paragraphs added, seemingly as an afterthought, in a few sections
<i>General, Organic, and Biochemistry.</i> (Brown and Rogers) Brooks Cole. 1987.		Not mentioned
<i>General, Organic, and Biological Chemistry.</i> (Solomon) McGraw Hill. 1987.		Not mentioned
<i>Foundations of Life: An Introduction of General, Organic, and Biological Chemistry.</i> (Feigl, Hill, and Boschmann) 3rd Edition. Macmillan. 1991.		Not mentioned
<i>Fundamentals of General, Organic, and Biological Chemistry.</i> (McMurphy and Castellion) 2nd edition. Prentice-Hall. 1996.		Not mentioned
4. Microbiology		
<i>Microbiology.</i> (Black) 5th edition. Wiley. 2002.		Microevolution briefly discussed (such as in the section of the development of bacterial resistance)
5. Genetics		
<i>Human Genetics.</i> (Lewis) 5th edition. McGraw Hill. 2003		Parts of 1 chapter out of 22; a few sections elsewhere
6. Zoology		
<i>Zoology.</i> (Hickman, et al.) 12th edition. McGraw Hill. 2003.		Parts of 1 chapter and short sections in several others out of 38 chapters
7. Anthropology		
<i>Anthropology.</i> (Ember and Ember) 5th edition. Prentice-Hall. 2003.		Parts of 5 chapters out of 22 chapters
<i>Anthropology.</i> (Kottak) 10th edition. McGraw Hill. 2003.		Major parts of 3 chapters and small sections of 2 other chapters out of 25 chapters
8. Chemistry		
<i>Fundamentals of Chemistry.</i> (Burns) 4th edition. Prentice-Hall. 2003.		Not mentioned

Equine Design

by Glen W. Wolfrom, Ph.D.

Among the equids, modern horses are marvels of grace and beauty. Recent reports reveal that they are also creatures with unique, exquisitely designed features.

A bone apart

The leg bones of a horse are subject to a great deal of stress, particularly when the animal is galloping. Much of the force associated with such movement is supported by the third metacarpus bone of the leg. The third metacarpus comprises the lower leg of the horse.

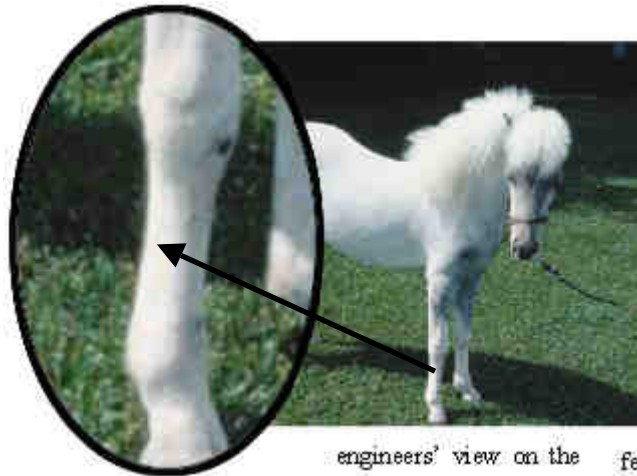
In the upper third of this metacarpus is a small hole (foramen) through which blood vessels enter the bone. It is well known that structures with holes are naturally weaker than are solid structures. Yet, while the third metacarpus can break, it doesn't fracture near the hole.

This design feature has been examined with interest by aerospace and mechanical engineers at the University of Florida (see Hoover, 2002). It seems that airplanes and spacecraft, like other vehicles, must have holes in their structures permitting the passage of essential wiring, hydraulic and fuel lines. While these structures can be reinforced around the holes by increasing the thickness of the surrounding material, this adds weight – a situation the engineers wish to avoid as much as possible in light of fuel and launch costs.

Upon analysis by microscopic and microradiographic techniques, the engineers have discovered that this bone is structured in such a manner as to displace the stresses away from the hole. Moreover, the foramen in the bone is stronger than a drilled hole. Through computer modeling of the natural bone's structure, the researchers hope to create a biomimetic* approach to manufacturing man-made materials having similar properties.

According one researcher, "We'll solve many problems using this bone." Another adds, "We'll be able to manufacture materials ... in a very elegant way that allows us to vary the properties **the way that nature does**" [emphasis added].

There was no hint in this article of these



engineers' view on the origin of such "natural" design in the first place.

But "the way nature does" things (*i.e.*, evolution) has not been shown experimentally to provide these kinds of results – all scientific evidence suggests that intelligent design is required.

Keeping a cool head

The usual mammalian mechanisms for cooling blood before it enters the brain are not adequate for horses. In fact, horses do not possess the primary brain-cooling structure which is present in many other large animals (*viz.*, the carotid rete mirabile, a large network of fine capillaries; Reid, 2000). While body heat is lost through sweating and transpiration from the lungs, these methods alone are not adequate.

Because of their athleticism, the blood of an exercising horse may be as much as 4 degrees higher than it is when the horse is at rest. If blood entered the brain at this temperature, the result (hyperthermia) would be disastrous (Reid, 2000).

Researchers at the University of Saskatchewan's Western College of Veterinary Medicine have studied this problem. They have determined that these extreme thermoregulatory demands are met by the two guttural pouches of the horse (Baptiste, *et al.*, 2000). Previously, however, there was no known function for these structures (Barber, 1991; p. 402).

The guttural pouches are air-filled diverticula of the auditory/eustachian tubes. Each pouch is about pint-sized (300-500 ml) and together they may exceed the

volume occupied by the brain itself (Reid, 2000). The internal carotid arteries (the main route by which blood is carried to the brain) pass through the thin mucous membrane of the pouches.

While the pouches do not exchange air with the outside, the air in the pouches remains relatively cooler than the blood, even during exercise. In fact, the guttural pouches are the only structures in this area of the head that are cooler than the blood. Furthermore, it was learned that little heat is transferred at rest, but the process becomes more efficient with exercise (Baptiste, *et al.*, 2000).

Baptiste, *et al.* (2000) cite others who have suggested that the brain of horses is cooled via the cavernous venous sinuses, which are located intracranially, by a mechanism similar to that of the rete mirabile. However, they note that this method falls short in that there is much less contact with the horse's internal carotid arteries, less arterial branching within the venous sinuses, and thick dura mater between these sinuses and base of the horse's brain.

Similar diverticula are known in only a few other animals (Baptiste, *et al.*, 2000). In horses, though, they have been demonstrated to possess a unique, vital function.

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* Biomimetrics – an engineering approach which consists of applying structural design principles in natural materials to man-made materials.



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Rules:

1. Entries will be accepted beginning January 1, 2004, and must be received by April 30, 2004. Mail entries to: MCF Contest, P.O. Box 952, Wheaton, IL 60189
2. Paper should be typewritten and double-spaced, not to exceed 1500 words for the Junior High level or 2500 words for the High School level. Give references to sources used.
3. Entries will include the Author's name, age, home address, phone number, email address, school. Specify Junior High or Senior High Level.
4. Essays will be judged on:
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Purpose:

To encourage the development of skills in research, analysis, and logical reasoning through preparing an effective presentation of a thesis in a creation-oriented paper.

Theme:

The author may select any topic that fits one of the following two themes. *Sample topics are listed for each theme, but the author is not limited to those shown.* It is recommended, but not required, that the author examine both sides of the chosen theme.

A. Creation and Compromises

Sample topics inspired by this theme:

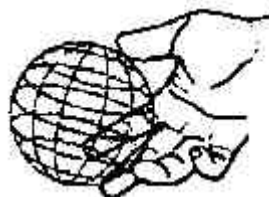
- Evolution's Impact on Compromises in the Christian Church
- Theistic Evolution and Progressive Creation as Biblical Compromises
- What's Wrong with Creation Compromises?
- Compromises of the Genesis Record

B. The Age of the Earth

Sample topics inspired by this theme:

- The Bible and the Age of the Earth
- The Age of the Earth's Atmosphere
- Sea-floor Sediment and the Age of the Earth
- Population Growth and Human Origins
- Populating the Earth after the Flood

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Through Him all things
were made;
without Him nothing
was made that
has been made.
— John 1:3

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Creation Calendar

Note: Items in "Creation Calendar" are for information only; the listing of an event does not necessarily imply endorsement by the Creation Research Society.

November 22

Touring the Solar System: Clues to Its Age, Part B by David Coppedge
7:00 pm, Evangelical Formosan Church, Torrence, CA
Sponsored by South Bay Creation Science Association
Contact: Garth Guessman 310-952-0424

2004

June 3-5

Annual Meeting, Creation Research Society Board of Directors
Phoenix, AZ

June 9-11

Discovering the Creator (early registration deadline May 1, 2004)
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All by Design

by Jonathan C. O'Quinn, D.P.M., M.P.

The Wolf's Snow Boots

Covering an area larger than the United States, Siberia is the largest, and coldest, forest on earth. It is also home to the Gray Wolf, one of Siberia's most skillful predators. One wonders how these wolves can not only survive temperatures as low as -94°F, but thrive throughout the bitter Russian winters, without hibernating. Scientists have discovered two important reasons for their success. The more obvious one is a double coat of coarse guard hairs, which overlay an undercoat so dense that the wolves can sleep warm and snug right on the snow at -40°F.

The second remains a marvel in the animal kingdom — vascular counter-current heat exchange. The arteries and veins in the wolf's lower legs are arranged with careful precision. They run parallel to and alongside each other, so that arteries delivering warm blood to the legs also transmit heat to veins that return cooler blood from the extremities and skin surface, warming it before it returns to the body core. This system so efficiently manages heat that not only do wolves not experience frostbite, their paws will not even melt the snow upon which they tread.

It is hard enough to account for the accidental evolution of the standard vertebrate vascular system, especially since the *same* "accident" must have occurred many times in such evolutionarily unrelated creatures



American Gray Wolf. Photo credit: Tracy Brooks, courtesy of US Fish and Wildlife Service.

as bats, whales, and fish. The additional presence of vascular counter-current heat exchange in not only wolves, but also the cold water-dwelling Great White Shark, further highlights the absurdity of evolutionary thinking.

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Dr. O'Quinn is a podiatrist with a Master's degree in physiology. This is the first in a series of notes illustrating the marvels of design that can be seen all around us.